

# **Resource Packet**

## **Assessment of Speech: Voice**



# VOICE SEVERITY RATING SCALE

Determination of Speech Impairment: Voice

Student \_\_\_\_\_ School \_\_\_\_\_ Grade \_\_\_\_\_ Date of Rating \_\_\_\_\_ DOB \_\_\_\_\_ Age \_\_\_\_\_ SLT \_\_\_\_\_

<b>Pitch</b>	<b>0</b> Pitch is within normal limits.	<b>1</b> There is a noticeable difference, which may be intermittent.	<b>3</b> There is a persistent, noticeable inappropriate raising or lowering of pitch for age and sex.
<b>Intensity</b>	<b>0</b> Intensity is within normal limits.	<b>1</b> There is a noticeable difference in intensity, which may be intermittent.	<b>3</b> There is persistent, noticeable, inappropriate increase or decrease in the intensity of speech or the presence of aphonia.
<b>Quality</b>	<b>0</b> Quality is within normal limits.	<b>1</b> There is a noticeable difference in quality, which may be intermittent.	<b>3</b> There is persistent, noticeable, breathiness, glottaltry, harshness, hoarseness, tenseness, stridency or other abnormal quality.
<b>Resonance</b>	<b>0</b> Nasality is within normal limits.	<b>1</b> There is a noticeable difference in nasality, which may be intermittent.	<b>3</b> There is persistent, noticeable cul de sac, hyper or hyponasality, or mixed nasality.

- Instructions:
1. Do not include regional or dialectal differences when scoring.
  2. Circle the score for the most appropriate description for each category, i.e., Pitch or Intensity.
  3. Compute the total score and record below.
  4. Circle the total score on the bar/scale below.

**2   3   4** | **5   6   7   8   9   10   11   12**  
**Mild** | **Moderate** **to** **Severe**

**TOTAL SCORE** \_\_\_\_\_

Based on compilation of the assessment data, this student scores in the *Mild*, *Moderate* or *Severe* range Voice Disorder.  
 There is documentation/supporting evidence of adverse effects of the Voice disorder on educational performance.

☐ Yes   ☐ No  
☐ Yes   ☐ No

*Determination of eligibility as a student with a Speech and/or Language Impairment is made by the IEP Team.*

Voice Severity Rating Scale

## **Assessment Guidelines for Speech – Voice**

### **VOICE ASSESSMENT CONSIDERATIONS**

There are multiple aspects to consider when evaluating voice impairments:

- pitch,
- loudness, and
- quality – including resonance.

Many disorders of voice or resonance have an organic etiology with a related medical history. Other disorders are functionally based, caused by “faulty usage” or behavioral histories. For assessment and instructional purposes, classifying voice disorders by vocal behaviors or symptoms provides the most useful information for the Speech-Language Therapist (SLT). Boone and McFarlane (1988) suggest that “Patients with voice quality and resonance problems generally require some medical evaluation of the ears, nose, and throat as part of the total voice evaluation...A laryngeal examination must be made before a patient can begin voice therapy for problems related to quality or resonance...Voice therapy efforts should be deferred until a medical examination (which would include laryngoscopy) is concluded, because there are occasional laryngeal pathologies, such as papilloma or carcinoma, for which voice therapy would be strongly contraindicated. In such cases, the delay of accurate diagnosis of these pathologies could be life-threatening (pp. 104-105).” No child should be enrolled for voice therapy without prior otolaryngological examination. However, the presence of a medical condition (e.g., vocal nodules) does not necessitate the provision of voice therapy as a disability requiring special education – nor does a prescription for voice therapy from a physician.

### **CONDUCTING A SPEECH EVALUATION FOR VOICE**

- Conduct hearing and vision screenings.
- Obtain relevant information from the parents (i.e., concerns about communication skills, developmental history, etc).
- Information must be gathered from two educators – the student’s classroom teacher as well as another professional. For preschoolers, obtain information from child care providers and other adults who see the child outside the family structure.
- Obtain information from teachers related to progress in the general curriculum, communication skills, behavior, and social interactions. General curriculum for preschoolers is developmentally appropriate activities.
- Review school records (e.g., grades, test scores, special education file, documentation of prereferral strategies/interventions, and discipline and attendance records).
- Complete an oral-peripheral examination.
- Obtain medical report from an Otolaryngologist.
- Collect a representative sample of the student’s speech.
- Analyze voice, pitch, intensity and quality.

- Document how the student's voice impairment adversely affects the student's educational performance in the general education classroom or the learning environment. For preschoolers, document how the voice dysfunction adversely affects their ability to participate in developmentally appropriate activities.
- Complete the *Voice Severity Rating Scale*.
- Finalize and submit to the IEP team a *Speech and Language Evaluation Report*.

### **INTERPRETING AND REPORTING EVALUATION RESULTS**

Several checklists are available to report findings. For more detailed information regarding procedures for assessing fundamental frequency/habitual pitch, breathing patterns and breath support, and the s/z ratio for respiratory/phonatory efficiency, refer to Assessment in Speech-Language Pathology: A Resource Manual (Shipley and McAfee, 1998). Procedures for the identification of resonance problems including hypernasality, hyponasality and assimilation nasality, and assessment of velopharyngeal functioning can be found in this resource packet as well. The impairment must not be related to unresolved upper respiratory infection or allergies that are not being actively treated by a physician.

### **USING THE VOICE SEVERITY RATING SCALE**

The *Voice Severity Rating Scale* is to be used as a tool after conducting a complete assessment of the student's voice. The scale is designed to assist the examiner with interpretation and documentation of the results of voice assessment findings in terms of severity (pitch, intensity, quality and resonance). This scale is not a diagnostic instrument and should not be used in the absence of assessment data.

In order to be identified as a student with a Speech Impairment with voice difficulties, the severity of voice dysfunction must be determined to have an "adverse effect on educational performance." The rating scale serves three purposes:

- 1) to document the presence of voice dysfunction and to what extent (*Mild, Moderate, Severe*),
- 2) to indicate the absence or presence of adverse effects on educational performance, and
- 3) to determine whether or not the student meets eligibility standards for a speech impairment in voice.

"Educational performance" refers to the student's ability to participate in the educational process and must include consideration of the student's social, emotional, academic, and vocational performance. The presence of voice dysfunction does not automatically indicate an adverse effect on the student's ability to function within the educational setting. The voice dysfunction must be shown to interfere with the student's ability to perform in the educational setting before a disability is determined. The effect on educational performance is, therefore, best determined through classroom observation, consultation with classroom teachers and other special educators, and interviews with parents and the student. Teacher checklists are useful for determining how the voice dysfunction affects educational performance.

## Parent Release of Information

Name: \_\_\_\_\_  
Date of Birth: \_\_\_\_\_  
School: \_\_\_\_\_  
Date Sent: \_\_\_\_\_

Dear Parent or Guardian:

Your child's teacher has expressed concerns about his/her voice. According to *Tennessee State Rules and Regulations* for Special Education programs, a voice assessment shall include an examination by an Otolaryngologist. We feel that s/he should be seen by an Otolaryngologist.

Please take the enclosed forms and information to the doctor with your

1. copy of this letter, and
2. medical response form with the attached envelope addressed to the school system.

The medical form is to be filled out by the doctor and returned to us so that we may determine appropriate follow-up services. In order to comply with federal law, your written permission is required so that the school system can receive information from your doctor. Please sign on the line indicated below and give this form to your child's doctor.

\_\_\_\_\_  
Parent's Signature

I, \_\_\_\_\_, permit my physician to  
release information about my child's voice mechanism examination to the  
\_\_\_\_\_ school system.

Sincerely,

\_\_\_\_\_  
Speech/Language Therapist

## Physician Signature Form

Name \_\_\_\_\_ Date Sent \_\_\_\_\_

Address \_\_\_\_\_ Birth Date \_\_\_\_\_

Parents \_\_\_\_\_ Telephone \_\_\_\_\_

School \_\_\_\_\_

Dear Physician:

The above-named student is suspected to have a voice problem. In accordance with Tennessee's *Eligibility Standards for Speech/Language Impairments*, a voice assessment shall include an examination by an Otolaryngologist. After your examination, please fill in the following information to assist in determining if voice therapy would be beneficial.

Medical diagnosis: \_\_\_\_\_

I. Nose: Obstruction? \_\_\_\_\_ If so, explain \_\_\_\_\_

II. Palate: Structural abnormalities? \_\_\_\_\_  
Functional abnormalities? \_\_\_\_\_  
Adequate velopharyngeal port closure? \_\_\_\_\_

III. Pharynx: Asymmetry of muscle contraction? \_\_\_\_\_  
Growth(s) or other abnormalities? \_\_\_\_\_

IV. Larynx: Size normal for age and sex? \_\_\_\_\_  
Do vocal folds approximate properly during phonation? \_\_\_\_\_  
Evidence of muscle tension during phonation? \_\_\_\_\_  
Color of vocal folds normal? \_\_\_\_\_  
Visible scars? \_\_\_\_\_ Growths? \_\_\_\_\_  
Other pathologies? \_\_\_\_\_

Does patient have allergies, sinus infections, or other chronic conditions, which might contribute to abnormal vocal quality? \_\_\_\_\_

Could patient's misuse of voice have contributed to abnormal structure or function? \_\_\_\_\_

Do your findings explain the abnormal vocal quality? \_\_\_\_\_

Do you recommend surgery? \_\_\_\_\_ Medication? \_\_\_\_\_

Do you recommend voice therapy with a trained speech-language pathologist? \_\_\_\_\_

Other recommendations: \_\_\_\_\_

Please return to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Voice Evaluation

(for Otolaryngologist)

STUDENT NAME \_\_\_\_\_ DATE OF BIRTH \_\_\_\_\_  
DATE OF REPORT \_\_\_\_\_ DATE SENT \_\_\_\_\_ AGE \_\_\_\_\_

\_\_\_\_\_ is suspected to have a voice problem.  
According to *Tennessee State Rules and Regulations* for Special Education programs, a voice assessment shall include an examination by an Otolaryngologist. The information you provide on this form is a required component for the assessment of voice impairment.

1. Are there any structural or functional abnormalities present for the following? (Check and describe briefly.)
  - ☐ Nose \_\_\_\_\_
  - ☐ Lips \_\_\_\_\_
  - ☐ Jaw \_\_\_\_\_
  - ☐ Tongue \_\_\_\_\_
  - ☐ Palate \_\_\_\_\_
  - ☐ Pharynx \_\_\_\_\_
  - ☐ Ears \_\_\_\_\_
  - ☐ Teeth \_\_\_\_\_
  - ☐ Other \_\_\_\_\_
  - ☐ No structural or functional abnormalities present
2. Describe the appearance of the vocal cords. (Check those that apply.)
  - ☐ Normal
  - ☐ Thickened
  - ☐ Edematous
  - ☐ Inflamed
  - ☐ Malformed
  - ☐ Other \_\_\_\_\_
3. Is there presence of vocal pathology?
  - ☐ Vocal nodules
  - ☐ Polyps
  - ☐ Ulcers
  - ☐ None
4. Are there any medical recommendations: \_\_\_\_\_  
\_\_\_\_\_
5. Some children can be helped to eliminate or modify voice problems through speech therapy. Do you see any limitations on the amount or kind of speech therapy?  
☐ No ☐ Yes \_\_\_\_\_
6. Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Otolaryngologist's Name (Print) \_\_\_\_\_ Date \_\_\_\_\_  
Otolaryngologist's Signature \_\_\_\_\_

## Teacher Input - Voice

Student \_\_\_\_\_ Date \_\_\_\_\_  
 Teacher \_\_\_\_\_ Grade/Program \_\_\_\_\_

Your observations of the above student's speech will help determine if s/he has a voice problem which adversely affects educational performance. Please answer all questions and return this form to \_\_\_\_\_.

	Yes	No
1. Is this student able to project loudly enough to be adequately heard in your classroom during recitations?	_____	_____
2. Does this student avoid reading out loud in class?	_____	_____
3. Does this student appear generally to avoid talking in your classroom?	_____	_____
4. Does this student ever lose his or her voice by the end of the school day?	_____	_____
5. Does this student use an unusually loud voice or shout a great deal in your classroom?	_____	_____
6. Does this student engage in an excessive amount of throat clearing or coughing? If so, which? _____ If so, how does it appear to disturb the other students, (e.g., their concentration, listening)? _____	_____	_____
7. Is this student's voice quality worse during any particular time of the day? If so, when? _____	_____	_____
8. Does this student's voice quality make it difficult to understand the content of his or her speech?	_____	_____
9. Does this student's voice quality in itself distract you from what s/he is saying?	_____	_____
10. Has this student ever mentioned to you that s/he thinks s/he has a voice problem?	_____	_____
11. Have you ever heard any of his/her peers mention his/her voice sounds funny or actually make fun of this student because of his/her voice problem?	_____	_____
12. If this student has a pitch that is too low or too high, does his/her pitch make it difficult to identify him/her as male or female just by listening?	_____	_____
13. During speaking, does this student's voice break up or down in pitch to the extent that s/he appears to be embarrassed by this?	_____	_____

☐ YES ☐ NO *It is my opinion that these behaviors adversely affect the student's educational performance.*

If yes, provide explanation: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Teacher's Signature \_\_\_\_\_ Date \_\_\_\_\_

Adapted from *Speech and Language Services in Michigan*: Suggestions for Identification, Delivery of Service and Exit Criteria, edited by Elizabeth Loring Lockwood and Kathleen Pistano. East Lansing: The Michigan Speech-Language-Hearing Association, 1991.



## Voice Evaluation Worksheets

Child \_\_\_\_\_ DOB \_\_\_\_\_ Date \_\_\_\_\_ SLT \_\_\_\_\_

School \_\_\_\_\_ Teacher \_\_\_\_\_ Grade \_\_\_\_\_

*Record areas assessed. The assessment should reflect areas of concern described in the referral and those that arise during the evaluation. Areas not assessed should be marked N/A.*

Voice Area	Impairment	Evidence	Adverse Effects on Educational Performance
<b>PHONATION</b>			
<b>Isolation</b>			
Total Pitch Range			
Optimum Pitch			
Pitch Appropriateness for Age			
Pitch Appropriateness for Sex			
Loudness Range			
Aphonia			
Breathiness			
Diplophonia			
Glottal Fry			
Hoarseness			
Harshness			
Tremor			

Child \_\_\_\_\_ Date \_\_\_\_\_

Voice Area	Impairment	Evidence	Adverse Effects on Educational Performance
<b>PHONATION</b> ( <i>cont'd</i> )			
<b>Connected Speech</b>			
Voice Onset			
Voiceless to Voiced			
Appropriateness of Loudness			
Pitch Breaks			
Pitch Range			
Habitual Pitch			
Aphonia			
Breathiness			
Diplophonia			
Glottal Fry			
Hoarseness			
Harshness			
Tremor			
<b>RESONANCE IN CONNECTED SPEECH</b>			
Hypernasality			
Hyponasality			
Throatiness/Cul De Sac			
Nasal Emission			
Assimilation Nasality			

Child \_\_\_\_\_ Date \_\_\_\_\_

Voice Area	Impairment	Evidence	Adverse Effects on Educational Performance
<b>PROSODY IN CONNECTED SPEECH</b>			
Stress			
Intonation			
<b>RESPIRATION</b>			
<b>Type of Breathing Pattern</b>			
At rest			
In Connected Speech			
<b>Breath Support for Speech</b>			
Posture			
Tension			
<b>ASSOCIATED FACTORS</b>			
Vocal Abuse Behaviors			
Personality Factors			
<b>ORAL MECHANISM</b>			
Structure			
Function/Tension			
<b>OTL EXAMINATION RESULTS</b>			

# Vocal Characteristics Checklist<sup>1</sup>

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Examiner: \_\_\_\_\_

**Instructions:** Check each characteristic your student exhibits and indicate severity. Make additional comments on the right-hand side of the page.

1 = mild

2 = moderate

3 = severe

## Comments

### Pitch

\_\_\_ too high \_\_\_\_\_

\_\_\_ too low \_\_\_\_\_

\_\_\_ monotone \_\_\_\_\_

\_\_\_ limited variation \_\_\_\_\_

\_\_\_ excessive variation \_\_\_\_\_

\_\_\_ pitch breaks \_\_\_\_\_

\_\_\_ diplophonia \_\_\_\_\_

### Loudness

\_\_\_ too loud \_\_\_\_\_

\_\_\_ too soft or quiet \_\_\_\_\_

\_\_\_ monoloudness \_\_\_\_\_

\_\_\_ limited variation \_\_\_\_\_

\_\_\_ excessive variation \_\_\_\_\_

### Phonatory-Based Quality

\_\_\_ breathy voice \_\_\_\_\_

\_\_\_ shrill voice \_\_\_\_\_

\_\_\_ strident voice \_\_\_\_\_

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<sup>1</sup> Assessment in Speech-Language Pathology 1998 by Singular Publishing Group.

**Phonatory-Based Quality** *(continued)***Comments**

\_\_\_ harsh voice \_\_\_\_\_

\_\_\_ hoarse voice \_\_\_\_\_

\_\_\_ quivering voice \_\_\_\_\_

\_\_\_ tremor in the voice \_\_\_\_\_

\_\_\_ weak voice \_\_\_\_\_

\_\_\_ loss of voice \_\_\_\_\_

\_\_\_ glottal fry \_\_\_\_\_

**Nasal Resonance**

\_\_\_ hypernasal \_\_\_\_\_

\_\_\_ nasal emission \_\_\_\_\_

\_\_\_ assimilation nasality \_\_\_\_\_

\_\_\_ hypernasal (denasal) \_\_\_\_\_

**Oral Resonance**

\_\_\_ cul-de-sac \_\_\_\_\_

\_\_\_ chesty \_\_\_\_\_

\_\_\_ thin, babyish voice \_\_\_\_\_

**Other**

\_\_\_ reverse phonation \_\_\_\_\_

\_\_\_ progressively weakening voice \_\_\_\_\_

\_\_\_ aggressive personality factors \_\_\_\_\_

\_\_\_ breathing through the mouth \_\_\_\_\_

\_\_\_ hard glottal attacks \_\_\_\_\_

\_\_\_ inadequate breath support \_\_\_\_\_

\_\_\_ throat clearing \_\_\_\_\_

\_\_\_ disordered intonational patterns \_\_\_\_\_

\_\_\_ disordered stress patterns \_\_\_\_\_

# Vocally Abusive Behaviors Checklist<sup>1</sup>

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Examiner: \_\_\_\_\_

**Instructions:** Have the student evaluate each behavior according to the rating scale. Use the comments column on the right-hand side to add any additional, relevant information.

1 = never

3 = occasionally

5 = always

2 = infrequently

4 = frequently

## Comments

- \_\_\_\_\_ alcohol consumption \_\_\_\_\_
- \_\_\_\_\_ arcade talking \_\_\_\_\_
- \_\_\_\_\_ arguing with peers, siblings, others \_\_\_\_\_
- \_\_\_\_\_ athletic activity involving yelling \_\_\_\_\_
- \_\_\_\_\_ breathing through the mouth \_\_\_\_\_
- \_\_\_\_\_ caffeine products used (coffee, chocolate, etc.) \_\_\_\_\_
- \_\_\_\_\_ calling others from a distance \_\_\_\_\_
- \_\_\_\_\_ cheerleading or pep squad participation \_\_\_\_\_
- \_\_\_\_\_ coughing or sneezing loudly \_\_\_\_\_
- \_\_\_\_\_ crying \_\_\_\_\_
- \_\_\_\_\_ dairy products used \_\_\_\_\_
- \_\_\_\_\_ debate team participation \_\_\_\_\_
- \_\_\_\_\_ environmental irritants exposure \_\_\_\_\_
- \_\_\_\_\_ grunting during exercise or lifting \_\_\_\_\_
- \_\_\_\_\_ inhalants used frequently \_\_\_\_\_
- \_\_\_\_\_ laughing hard and abusively \_\_\_\_\_
- \_\_\_\_\_ nightclub social talking \_\_\_\_\_

<sup>1</sup> Assessment in Speech-Language Pathology 1998 by Singular Publishing Group.

## Comments

_____ participation in plays_____	
_____ singing in an abusive manner_____	
_____ smoking_____	
_____ speeches presented_____	
_____ talking loudly during menstrual periods_____	
_____ talking loudly during respiratory infections_____	
_____ talking for extended periods of time_____	
_____ talking in noisy environments_____	
_____ talking in smoky environments_____	
_____ talking while in the car_____	
_____ teaching or instructing_____	
_____ telephone used frequently_____	
_____ vocalizing toy or animal noises_____	
_____ vocalizing under muscular tension_____	
_____ yelling or screaming_____	
_____ other _____	

## Vocal Self-Perception: Attitudinal Questionnaire

1. Do you ever think about your voice?	Yes	No	No Opinion
2. Have you ever heard your voice on tape playback (e.g., on cassette recorder, answering machine)?	Yes	No	No Opinion
3. Did you like your voice on tape playback?	Yes	No	No Opinion
4. Has anyone ever commented on your voice? <i>If Yes, what was said?</i> _____	Yes	No	No Opinion
5. Do you think your voice represents your image of yourself (masculine, feminine, intelligent, educated, friendly, etc.)? <i>If Yes or No, in what way?</i> _____	Yes	No	No Opinion
6. Do any of your friends, male or female, have voices that you especially like? <i>If Yes, explain.</i> _____	Yes	No	No Opinion
7. Do any of your friends, male or female, have voices that you especially dislike? <i>If Yes, explain.</i> _____	Yes	No	No Opinion
8. Does your voice sound like that of any other member of your family? <i>If Yes, explain.</i> _____	Yes	No	No Opinion
9. Circle any words below that describe your voice and the way you speak in general (either on tape replay or while actually talking).			
<p>pleasant</p> <p>sexy</p> <p>raspy</p> <p>hoarse</p> <p>harsh</p> <p>shrill</p> <p>squeaky</p> <p>monotonous</p> <p>nasal</p> <p>mumble</p> <p>husky</p>	<p>too soft</p> <p>high-pitched</p> <p>low-pitched</p> <p>grow</p> <p>too fast</p> <p>too slow</p> <p>weak</p> <p>breathy</p> <p>weak</p> <p>clear</p>	<p>too loud</p> <p>strong</p> <p>thin</p> <p>whiney</p> <p>interesting</p> <p>resonant</p> <p>masculine</p> <p>feminine</p> <p>resonant</p> <p>expressive</p> <p>average</p>	<p>Add any other terms that may describe your voice.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>



# Voice Conservation Index for Children<sup>1</sup>

CHILD'S INITIALS \_\_\_\_\_ AGE \_\_\_\_\_ SEX \_\_\_\_\_ DATE \_\_\_\_\_

Please circle the answer that is best.

1. When I get a cold, my voice gets hoarse.  
*All the time      Most of the time      Half the time      Once in a while      Never*
2. After cheering at a ballgame, I get hoarse.  
*All the time      Most of the time      Half the time      Once in a while      Never*
3. When I'm in a noisy situation, I stop talking because I think I won't be heard.  
*All the time      Most of the time      Half the time      Once in a while      Never*
4. When I'm in a noisy situation, I speak very loudly.  
*All the time      Most of the time      Half the time      Once in a while      Never*
5. When I'm at home or at school, I spend a lot of time talking every day.  
*All the time      Most of the time      Half the time      Once in a while      Never*
6. I like to talk to people who are far away from me.  
*All the time      Most of the time      Half the time      Once in a while      Never*
7. When I play outside with my friends, I yell a lot.  
*All the time      Most of the time      Half the time      Once in a while      Never*
8. I lose my voice when I don't have a cold.  
*All the time      Most of the time      Half the time      Once in a while      Never*
9. People tell me I talk too loudly.  
*All the time      Most of the time      Half the time      Once in a while      Never*
10. People tell me I never stop talking.  
*All the time      Most of the time      Half the time      Once in a while      Never*
11. I like to talk.  
*All the time      Most of the time      Half the time      Once in a while      Never*
12. I talk on the phone.  
*All the time      Most of the time      Half the time      Once in a while      Never*
13. At home, I talk to people who are in another room.  
*All the time      Most of the time      Half the time      Once in a while      Never*
14. I like to make car or other noises when I play.  
*All the time      Most of the time      Half the time      Once in a while      Never*
15. I like to sing.  
*All the time      Most of the time      Half the time      Once in a while      Never*
16. People don't listen to me unless I talk loudly.  
*All the time      Most of the time      Half the time      Once in a while      Never*

Source: Saniga, R.D. and Carlin, M.F. "Vocal Abuse Behaviors in Young Children". Language, Speech, and Hearing Services in Schools, 1993: 24 (2), p. 83. Reprinted by ASHA with permission of authors..

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<sup>1</sup> Saniga and Carlin (1991)